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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,173	04/23/2001	Yoshihito Asao	Q63614	4871

7590 07/09/2002

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[REDACTED] EXAMINER

LAM, THANH

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 07/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/839,173</b>	Applicant(s) <b>Asao et al.</b>	
	Examiner <b>Thanh Lam</b>	Art Unit <b>2834</b>	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)  Responsive to communication(s) filed on Elect. filed on 5/15/2002

2a)  This action is **FINAL**.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4)  Claim(s) 1-15 is/are pending in the application.

4a) Of the above, claim(s) 4-7, 9, and 12-15 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-3, 8, 10, and 11 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some\* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4      6)  Other: \_\_\_\_\_

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**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 1-3,8,10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. in view of Takahashi et al.

Regarding claims 1 and 8, Kitamura et al. disclose an automotive alternator comprising: an inboard bracket (51) formed in a bowl shape having a cylindrical inboard bearing box in a central portion of an end surface, and an outboard bracket (52) formed in a bowl shape having a cylindrical outboard bearing box in a central portion of an end surface, said brackets being joined with open portions of said bowl shapes facing each other; a shaft (6) rotatably supported in said inboard and outboard brackets by means of inboard and outboard bearings (4,5) disposed inside said inboard and outboard bearing boxes; a pulley (15) fixed to an inboard end portion of said shaft; a stator disposed such that first and second ends thereof are supported in said inboard and outboard brackets; a rotor fixed to said shaft, said rotor being disposed radially inside said stator; a rectifier (14) disposed in said outboard bracket on an outer circumferential side of said outboard bearing box; and a ventilation aperture bored through said outboard bracket on an outer circumferential side of said outboard bearing box, said automotive alternator being constructed such that said rectifier is cooled by allowing air to flow through said ventilation aperture.

Takahashi et al. disclose a bearing (fig. 7D) is constituted by a multi-row bearing having one inner ring (8) and one outer ring (5), a plurality of ball tracks (6,7) disposed axially between said inner ring and said outer ring, and a plurality of balls disposed in each of said ball tracks.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the outboard bearing of Kitamura et al. by the bearing as taught by Takahashi et al. in order to prevent the creep of the outer board bearing.

Regarding claims 2, and 10, the proposal in combination of Kitamura et al. and Takahashi et al. disclose slip rings for supplying a field current to a field winding in said rotor disposed at an outboard end of said shaft, wherein a diameter of said multi-row bearing and a diameter of said slip rings are constructed so as to be substantially equal.

Regarding claim 3, and 11, the proposal in combination of Kitamura et al. and Takahashi et al. disclose said shaft is supported in said multi-row bearing such that an outboard end surface of said shaft is positioned between an outboard end surface of said multi-row bearing and a center line of an outermost ball track at said outboard end.

***Election/Restriction***

4. Applicant's election without traverse of claims 1-3, 8, and 10-11 in Paper No. 6 is acknowledged.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone number for this Group is (703) 305-3432.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0656.

  
Thanh Lam

Patent Examiner

July 3, 2002